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## State Board of Health

### Meeting of June 1.

The State Board of Health met in regular session in Sacramento on June 1st. The following members were present: Dr. George E. Ebricht, President; Dr. F. F. Gundrum, Vice-President; Dr. Edward F. Glaser and Dr. Adelaide Brown.

Dr. Galvin J. Telfer was appointed State Health Officer for the Southern District beginning June 1st.

Upon the recommendation of the Director of the Bureau of Venereal Diseases the name of the Bureau was changed from "The Bureau of Venereal Diseases" to "The Bureau of Social Hygiene."

Upon the recommendation of the Director of the Bureau of Tuberculosis the subsidy was suspended for twenty-three beds in the women's ward of the Los Angeles County Hospital, for fifteen beds in Ward 8 of the San Francisco Hospital, and for the entire Tuberculosis Ward of the Sacramento County Hospital. These suspensions were made because the standards required by the State Board of Health were not being maintained.

Upon the recommendation of the Director of the Bureau of Tuberculosis, a dietitian will be employed temporarily to go into the tuberculosis hospitals for the purpose of arranging proper diets for the class of patients in these institutions. The Secretary pro tempore was instructed to notify all tuberculosis hospitals that separate ward provisions for children must be made.

The Board passed a resolution to the effect that a regular collegiate course in Mills College, leading to a degree and two additional years of training in the University of California Hospital or Lane Hospital be accepted as meeting in full the requirements of the Nurses' Registration Act for an accredited training school.

Certificates as registered nurses were granted to two nurses under the reciprocity provisions of the Nurses' Registration Act.

Upon the recommendation of the Director of the Bureau of Sanitary Engineers, under certain conditions a temporary permit was granted to the Sycamore Canyon Water Company near Glendale. A temporary permit was granted to A. V. Faight of Stockton to use a sewer well in Manteca for a period of six months.

The regular hearings of food and drug cases were then taken up by the Board.

F. F. GUNDRUM, M. D.,  
 Vice-President and Secretary pro tem.

## Head Measurements of Soldiers and Identification

By ARTHUR MacDONALD,  
 Anthropologist, Washington, D. C.

I have submitted to the War Department for consideration some of the reasons why the measurements of the maximum lengths and maximum widths of the heads of soldiers should be taken. I suggest that this be done when the height of the soldier is measured in his regular examination for military service. These measurements with the collateral evidence, such as comparison of teeth with the dentist's record at home and with the evidence as to age, as indicated by ossification of the skeleton, will greatly increase the facility and probability of identification.

### Collateral Evidence.

**Teeth:** Form, size, kind, regularity, position, and any peculiarity. Also nature of the fillings, whether crown or not, broken teeth, degree of decay and other details familiar to dentists.

**Synostoses:** The most frequent place is at a point on the sagittal suture at the union of its posterior fifth with its anterior three-fifths where the suture is clearly marked obelion. If the suture is entire, the individual is about thirty-five years of age or less. If the posterior sagittal point is commencing to close in, the subject is about forty years of age. The ossification of the coronal suture close to bregma indicates a subject fifty or more years of age. A closed temporal suture indicates an age of sixty-six years or more. In the white race ossification generally proceeds from behind forward; in the negro race it is the reverse.

**Condition of Skeleton:** Ossification of long bones: At sixteen, the calcaneum is ossified throughout; at seventeen the greater trochanter is united to the head of the femur; at eighteen the superior extremity of the femur is united in its entirety to the shaft; at nineteen the epiphyses of the metatarsal bones are united to the body; at twenty, the epiphyses of the metacarpal bones are united to the body; at forty-five, the xiphoid cartilage is ankylosed to the sternum; at fifty, the coccyx is ankylosed to the sacrum. These and other general statements based upon leading authorities would help much as collateral evidence towards identification when age is in question.

### Comparison of Head Measurements of the Dead With Those of the Living.

In comparing the maximum length and maximum width of a skull where the soft parts are absent or decayed away with the measurements of the living subject 5.1 millimeters should be added to the maximum length and 6.9 millimeters to the maximum width of the skull. In addition to this, the cephalic index of the living subject can be compared with the cephalic index of the skull after death by adding two units to the cephalic index of the skull as done by Topinard and other authorities.

It might be added that the time required to make the measurements of the maximum length and maximum width of head is one minute. One person could measure from three to four hundred soldiers a day. The callipers to make the measurements would not cost more than \$10 a pair, and probably much less. The Bertillon cephalometer, a French instrument, or the Collyer cephalometer, an American instrument, could be used. If not possible at first to make these measurements of all the soldiers, I would suggest a beginning be made as early as possible. As the French are very expert in such matters, it might be possible to have many of our men in Europe measured and the measurements sent back to this country. The men could be measured at any time here or in Europe convenient for them.

### Physical Status of the American People.

The physical measurements of our young men

that are now being made for their entrance into the military service are the beginning on a large scale of establishing the physical status of the American people. These measurements of maximum width and maximum length of head which furnish the cephalic index are the two most important measurements of the body, and therefore increase greatly the scientific value of all the other measurements, whether physical or psychological. As most all important studies of peoples and races have the cephalic index, these two head measurements would make it possible to compare the American people with other peoples, races and nations. The American people are paying and sacrificing for the war; they are therefore entitled to such knowledge.

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 Topinard, *Anthropology*, London, 1878, with introduction by Broca, 8<sup>o</sup>, 548 pp.  
 Deniker, *Races et peuples de la terre*, 16<sup>o</sup>, Paris, 1900.  
 Manouvrier, *Aperçu de céphalométrie anthropologique.* Année Psychologique, 1898.  
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## American Women's Hospitals

Dr. Louise Richter of the American Women's Hospitals spoke at the picnic of the Los Angeles Pioneers of California on May 25 in Sycamore Grove, as follows:

During the 1917 meeting of the American Medical Association, a number of representative women physicians of that organization, who are also members of the medical women's National Association, appointed a war service committee; and this committee inaugurated the American Women's Hospitals, with the approval of the Surgeon-General of the Army and the Director-General of the Department of Military Relief of the American Red Cross.

One object of this war committee was to determine the number of women physicians in the United States and the number willing for war service, but the main object in view was to establish a hospital, with a circle of outlying dispensaries in one of the devastated countries, when necessary.

This committee found that there were about 6000 women physicians in the United States, and more than 2000 have expressed a desire for war service, either at home or abroad.

The name American Women's Hospitals was chosen as a parallel and complimentary to the Scottish women's hospitals.

These professional women of America desire to follow in the footsteps of their British sisters and "do their bit" in this world's war for righteousness.

In the beginning of the war the British women physicians offered their services to their own country, but as you know at that time Great Britain was not favorable to women in the profession as well as in many other walks of life, so they were told that the British Red Cross and the War Office were fully supplied. However, undaunted, these patriotic women offered their services to the Allies and were accepted at once by the French, Belgian and Serbian Red Cross.

In December, 1914, the first complete hospital unit was sent out under the French Red Cross; their hospital of 400 beds was placed behind the firing line in sound of the guns.

In two years 2859 operations had been performed upon the wounded French, with 1.9 per cent. mortality.

The Scottish Women's Hospitals sent out their first unit to Serbia in January, 1915, just after the

Austrian Army had been driven over the Serbian frontier, leaving thousands of their dead, sick and wounded behind. Every room and building available was filled with these miserable, shivering verminous men suffering with typhus of the most virulent type, septic wounds and bed sores.

They took charge of a 570-bed hospital when an urgent call came from 70,000 typhus cases entirely unattended and Dr. Alice Hutchinson was sent on with another unit, with fresh supplies from Scotland. On the way they halted at Malta to care for their own wounded countrymen from the Dardanelles.

They established four units in Serbia and cared for thousands and thousands of the sick and wounded, and the mortality was extremely high and their hospitals were hard hit, but they continued to work and work until they were gradually driven back by the Austro-German Army.

The Scottish Women's Hospitals did work of untold value in Salonica, Corsica, Russia and finally began work under the British War Office.

They now have eleven units in the devastated countries. The British Government have been fully convinced of the fitness of women physicians for medical war service. The Scottish Women's Hospitals have been placed in charge of a hospital of 600 beds in London for the British wounded.

The British Government is not only urging the women to study medicine but offering to pay for the medical education of women adapted for this work who are unable to meet their own expenses.

The work of the Scottish Women's Hospitals extends to the care of old people, babes and mothers, the wounded in the trenches, inspection of civic sanitary conditions, management of base hospitals, care of refugee children and the expectant mothers.

Women physicians placed in civilian relief work would leave the medical men free for military duty.

A number of the American women physicians offered their services when needed and now it is their duty to answer the urgent, insistent call for foreign war service and they have taken for their slogan "We are ready; put us across."

The patriotic men and women of the United States will undoubtedly support the American Women's Hospitals, just as the British men and women have supported the Scottish Women's Hospitals.

Besides efficiency in caring for the wounded soldiers, the women physicians can face cheerfully all hardships and bring a woman's atmosphere of comfort and a suggestion of home to our boys "over there."

Sixty-five American women physicians are already "across" and still insistent calls for more are coming from France, Serbia, Belgium and Italy.

Three women physicians from Los Angeles are now in foreign lands. Drs. Helen Woodroff and Margaret Farwell are doing civilian relief work in France.

A recent letter from Dr. Farwell expresses fully the need for medical women. She says: "The need for workers here is far greater than ever before and I only hope you will all work and work and then do it all over again and again. The woe and want is quite past belief. We think that the tenements at home are in poor condition and they are bad, but they cannot compare with what has happened to the children of France and the women of France, during these three years of perfect hell. Thank God it can never come to the United States."

One American woman physician is in a military hospital with General Pershing. One has charge of a maternity and children's hospital. Another is making a survey of the institutions for refugee children in France. Another has charge